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07/20/2010

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120 S RIVERSIDE PLAZA

22ND FLOOR

CHICAGO, IL 60606

EXAMINER

CROUSE, BRETT ALAN

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Application Status

1. This office action is in response to the amendment, filed 30 April 2010, which amends claim 22. Claims 22-27 are pending.
2. The rejection of claims 22-27 under 35 U.S.C. 112, second paragraph, with regard to the term “relatively constant” is overcome by the amendment, filed 30 April 2010.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 22-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 22 as amended recites an external sleeve having a first diameter and a cylindrical globe having a second diameter. The claim later recites that the first diameter is smaller than the second diameter. The first diameter of the external sleeve would need to be greater than that of the second diameter for the sleeve to be external to the globe. Claims 23-27 ultimately depend from claim 22 and inherit the limitations thereof.

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For purposes of examination the diameter of the sleeve is treated as greater than the diameter of the globe.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 22-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baillie et al., WO 02/075205, in view of Stob, US 4,991,070 and Cicarelli US 4,991,070.

Baillie teaches:

As to claim 22:

Page 2, lines 5-10, teach that the light fittings are used in proximity to an artificial light source and comprise a luminescent material which is charged by the light emitted by the light source and which emits light when the light source is extinguished. This is held to teach that the luminescent material satisfies the limitation of a phosphor of the instant invention.

Page 4, line 20 through page 5, line 7, teach that the light fittings of Baillie include light and lamp shades, light reflectors, light bulbs, light tubes including fluorescent light tubes,

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covers of light sources, strip light protective sleeves. The passage additionally teaches that the articles can be covered in part or in their entirety.

Page 5, lines 11-13, teach the light fitting can be in proximity to the light source. This is held to encompass being spaced from the light source.

Page 6, lines 12 through page 7, line 7, teach that the base material should preferably be of high clarity to allow transmission of light. The passage additionally teaches that the luminescent material can be incorporated into the base material or can be provided as a film or coating upon the base material.

Page 11, lines 9-15, teach the fitting providing connection pins for a fluorescent tube.

Baillie provides a fluorescent tube in which the mounting (i.e. the fitting of Baillie) encompasses the tube by being integral with the tube and provides connection pins for the fluorescent tube as part of the mounting. Baillie also teaches sleeves which can encompass a light tube. Baillie also teaches protective sleeves spaced in proximity to the tube.

As to claims 23-25:

Page 5, line 14 through page 6, line 2, teaches the fitting can be formed from various base materials including glass and plastics. Examples of suitable plastics include acrylics, polyolefins such as polypropylene, polystyrene and polycarbonate.

As to claims 26 and 27:

Page 3, lines 4-9, teach that the luminescent material is preferably a rare earth metal such as europium. Additionally, the luminescent material preferably also comprises an alkaline earth metal, which is preferably strontium.

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Page 6, lines 5-11, teach that the preferred embodiment of the luminescent material comprises europium or dysprosium preferably in combination with strontium oxides or aluminates. It is held that one of ordinary skill in the art would at once envisage the luminescent material comprising strontium aluminate(s) and europium.

Baillie does not teach:

Baillie does not provide a teaching of friction fit end piece as part of a sleeve encompassing a fluorescent tube. Baillie also does not recite equidistant spacing for a fitting from the fluorescent tube.

Regarding the distance between the light tube and light fitting:

Stob teaches:

Column 2, lines 12-46, figures 4, 5, 6, teach a sleeve for receiving a conventional fluorescent element which is closed off at opposite ends by end caps. The sleeve provides protection for the tube and assists in controlling the direction of the observed light output. The passage additionally teaches that the tube can be rotated relative to the element. The figures indicate a uniform spacing between the fluorescent tube and longitudinal sleeve wall.

Column 5, lines 22-27, figure 4, teaches the end caps further comprise apertures (50) through which the prongs of the element (52) can penetrate.

Regarding the use of a friction end cap:

Column 5, lines 1-10, figure 4, teach end caps that slidably engage the wall of the tube. The passage further describes figure 4 and teaches that the end cap 40, comprises a rim

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42, which slidably and rotatably mount to the tube 12 and an end face 44. The illustration indicates a distinct difference in regions and diameter. The passage further teaches that the rim slidably engages the wall 19 of the tube 12. Thus, the rim of the end cap is in frictional contact with the wall 19 of the protective tube 12.

It would have been obvious to one of ordinary skill in the art to provide a protective sleeve as taught by Stob as the base material to the sleeve of Baillie to provide protection to the fluorescent tube and to allow for control of the direction of emission of light from the fixture of Baillie as suggested by Stob.

Column 3, lines 40-44, teach selecting materials for the sleeve which are resistant to the heat generated by the light tube.

It would have been obvious to one of ordinary skill in the art to select materials resistant to the heat generated by the light tube and to configure the materials to efficiently dissipate the heat to which the sleeve is exposed in order to prevent the thermal degradation of the materials of the sleeve or dopants therein.

Cicarelli teaches:

Cicarelli is added to clarify the state of the art concerning end-caps for fluorescent light fixtures.

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Column 4, line 62 through column 5, line 13 and figures 3, 4, 4a, 5, which indicate that various types of end-caps are available and common to the fluorescent fixture industry. The passage additionally teaches as a preferred embodiment a rim on the end cap thus providing a region of differing diameter. The passage from Cicarelli also indicates it was also known to use an end-cap to secure a sleeve to a fluorescent tube and in the preferred embodiment that the end cap assists snug fit of the sleeve. Figures 4 and 5 additionally illustrate the dimensions of the end cap. Figure 4, illustrates the end cap having two regions one of greater thickness than the other. Figure 5, additionally illustrates the end cap on the fixture in which the section of end cap adjacent to the sleeve is about the same diameter as the sleeve and the section of the end cap adjacent to the end of the tube is a smaller diameter fitting the end of the tube.

It is believed by the examiner that Baillie in view of Stob teaches or suggests all the elements of the instant claims.

However, if it is found that Baillie and Stob do not teach or suggest the elements of the end cap, it would have been obvious to one of ordinary skill in the art to select an end-cap for securing a sleeve to a light tube by frictional contact from those commonly known in the industry such as those illustrated by Cicarelli and to use such an end-cap to secure the sleeve of the light fixture of Baillie.

Response to Arguments

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7. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues opposite the rejection over Baillie, Stob, and Cicarelli that the references alone or in combination do not teach or suggest an end cap having two regions of differing diameters. The examiner respectfully disagrees for the reasons below.

The end cap illustrated by Stob teaches two regions 42 and 44 which have a difference in diameter at the intersection of part 44 and 42. Cicarelli also teaches in figures 4 and 5 an end cap having two regions of differing diameter.

Applicant also argues that the references do not teach or suggest a friction fit end cap. The examiner respectfully disagrees for the reasons below.

The claims recite a friction fit end cap. The claims do not recite that the sleeve can not be rotated. Stob teaches a sleeve and end cap held in place by friction in which the sleeve can rotate. Cicarelli teaches a sleeve and end cap which fits snugly in the preferred embodiment of column 5. Thus, the prior of record teaches or suggests it was known in the art to provide an end cap held in place by friction which allows rotation or fits snugly.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brett A. Crouse whose telephone number is (571)-272-6494. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, D. Lawrence Tarazano can be reached on 571-272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/B. A. C./
Examiner, Art Unit 1794

/D. Lawrence Tarazano/
Supervisory Patent Examiner, Art Unit 1786